EXHIBIT A

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Norbert Hofmann

Serial No.: 10/677,672 Group Art Unit: 3679

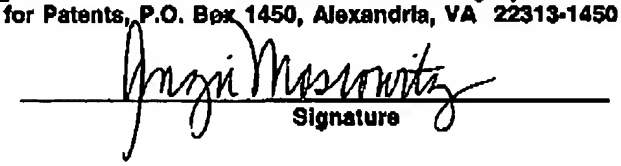
Filed: October 2, 2003 Examiner: Gregory John Binda

For: TRIPODE JOINT FOR INCREASED ARTICULATION ANGLES

Attorney Docket No: GKNG 1180 PUS

I hereby certify that this correspondence is being sent via facsimile to: Attn: Examiner Gregory John Binda, Mail Stop Non-Fee Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 fax number (703) 872-9306 on:

January 14, 2005 Angie Moscowitz
Date of Deposit



Signature

AMENDMENT AND REQUEST FOR RECONSIDERATION

Mail Stop Non-Fee Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Applicant submits this Amendment and Request for Reconsideration in response to the Office Action dated October 14, 2004. This response is timely because it is being filed within the three-month time period allowed for a response. Please amend the above-identified application as follows:

IN THE DRAWINGS:

Please substitute the three (3) sheets of drawings submitted herewith containing Figures 3, 4, 5A, 5B, 6A and 6B in place of the originally-filed drawing sheets containing the same Figures.

IN THE SPECIFICATION:

Please replace paragraph [0002] with the following amended paragraph:

[0002] Tripode joints of the above-mentioned type have been produced and distributed by ~~the applicant~~ GKN Driveline Deutschland GmbH for some time under the designation of AAR tripode joints. In particular, they are used in motor vehicle driveshafts such as sideshafts which serve to provide a driving connection between the differential drive and the driving wheels. It is common practice to use so-called constant velocity fixed ball joints at the wheel end and so-called AAR tripode joints as plunging joints at the differential. To date, the AAR tripode joints have been designed for articulation angles ranging from approximately 23° to 26°. In connection with the increasing popularity of off-road vehicles and sport utility vehicles, there is an increasing demand for larger operational articulation angles which, so far, has meant that the so-called AAR tripode joints were replaced by double offset joints which are also axially displaceable (DO plunging joints) or by a combination of constant velocity fixed ball joints and axial plunging units. Such solutions are either less advantageous in respect of their NVH (noise, vibration, harshness) behavior (DO plunging joints) or generate much higher production costs (fixed ball joints with additional plunging units). Thus, there exits a need for tripode joint having an increased articulation angle.

Please replace paragraph [0015] with the following amended paragraph:

[0015] ~~Figure 5 shows~~ Figure 5A and 5B show a tripode joint with a roller embodiment according to Figure 4 in a cross-section at an articulation angle of 17°, and in ~~with~~ an enlarged detail, respectively.

Please replace paragraph [0016] with the following amended paragraph:

[0016] ~~Figure 6 shows~~ Figures 6A and 6B show a tripode joint with a roller embodiment according to Figure 4 in a cross-section at an articulation angle of 31°, and in ~~with~~ an enlarged detail, respectively.

Please replace paragraph [0020] with the following amended paragraph:

[0020] Figure 3 shows an inventive roller assembly in half a section through the roller axis in a first embodiment. The associated tripode arm can also be seen. The Figure shows the relative position which is assumed when the joint is in the aligned position, with the axes A11 and A12 coinciding. WZ refers to the effective line by which the spherical face 22 of the arm head 21 acts on the roller carriers 23 of the roller assembly. WR refers to the effective line by which the track 16 in the outer joint part acts on the roller 25. The parallel offset of the two effective lines shows that, when torque is transmitted, a tilting moment is applied to the roller assembly, so that, when the joint is in an aligned position, the roller assembly assumes a stable position of contact within the tracks. The bearing needles 24 as well as the roller carriers 23 are held by two securing rings 26, 27 relative to the roller 25 in such a way that they cannot get lost. The two securing rings engage inner grooves 36, 37 formed in the cylindrical inner face of the roller 25. On its outside, the roller carrier 23 is held by two stop collars 38, 39 with an axial displacement clearance between the securing rings 26, 27 and, with reference to the axis (not shown) of the tripode star, on the radial inside end, comprises a cylindrical projection 42. The stop collars 38, 39 delimit the axial length of the needle contact face 41. The axial length of the needle contact face 41 positioned on the outside is smaller by the displacement clearance SA than the inner distance between the securing rings 26, 27. The length of the arm contact face 40 on the inside corresponds to the inner distance between the securing rings 26, 27. The axial displacement clearance SA is obtained as a result of the shortened needle contact face 41 on the outside of the roller carrier 23 relative to the arm contact face 40 on the inside of the roller carrier 23. Thus, the cylindrical projections 42, with respect to the roller axes AR, increase the axial length of the arm contact face 40 beyond the extension of the needle contact face 41. However, in this example, at the radial outside end of each roller carrier, with respect to the first longitudinal axis A11, the arm contact face 40 and the needle contact face 41 are flush with each other. ~~As far as the functioning of the inventive joint is concerned, the roller carrier 23 should be radially inwardly displaceable relative to the roller 25 with reference to the axis of the tripode star, which displaceability permits greater movement of the arm head 21 when the joint is articulated in that the arm head 21 takes along the roller carrier 23 radially inwardly via friction forces and, in the process, displaces the arm contact face 40 far enough for the contact with the arm head 21 not to be lost. The greater arm head movements which are possible as a result correspond to greater articulation movements of the joint.~~

Please add the following new paragraphs after paragraph [0020]:

[0020.1] As far as the functioning of the inventive joint is concerned, the roller carrier 23 should be radially inwardly displaceable relative to the roller 25 with reference to the axis of the tripode star, which displaceability permits greater movement of the arm head 21 when the joint is articulated in that the arm head 21 takes along the roller carrier 23 radially inwardly via friction forces and, in the process, displaces the arm contact face 40 far enough for the contact with the arm head 21 not to be lost. The greater arm head movements which are possible as a result correspond to greater articulation movements of the joint.

Please replace paragraph [0021] with the following amended paragraph:

[0021] Figure 4 shows an inventive roller assembly as already illustrated in Figure 3, in a half-section through the roller axis in a modified embodiment. The associated tripode arm 19 can again be seen, with the Figure showing the relative position assumed when the joint is in the aligned condition, with the axes 11 and 12 coinciding. WR refers to the effective line by which the track 16 in the outer joint part acts on the roller 25. The parallel offset of the two effective lines shows that, when torque is transmitted, a tilting moment is applied to the roller assembly, so that, when the joint is in an aligned position, the roller assembly assumes a stable position of contact within the tracks. The bearing needles 24 as well as the roller carriers ~~23~~ 123 are held by two securing rings 26, 27 relative to the roller 25 in such a way that they cannot get lost. The two securing rings engage inner grooves 36, 37 formed in the cylindrical inner face of the roller 25. On its outside, the roller carrier ~~23~~ 123 is held by two stop collars 38, ~~39~~ 139 with an axial displacement clearance between the securing rings 26, 27 and, with reference to the axis (not shown) of the tripode star, on the radial inside end, comprises a cylindrical projection 42 and, on the radial outside end, a cylindrical projection 43. The stop collars 38, 139 delimit the axial length of the needle contact face 41. The axial length of the needle contact face 41 positioned on the outside is smaller by the displacement clearance SA than the inner distance between the securing rings 26, 27. The length of the arm contact face 40 on the inside corresponds to the inner distance between the securing rings 26, 27. The axial displacement clearance SA is obtained as a result of the needle contact face 41, on the outside of the roller carrier ~~23~~ 123, being shortened by an amount SA/2 on both sides, relative to the arm contact face 40 on the inside of the roller carrier ~~23~~ 123. Thus, the cylindrical projections 42, 43, with respect to the roller axes AR, increase the axial length of the arm contact face 40 beyond the extension of the needle contact face 41 on both the radial inside end and the radial outside end. ~~As far as the functioning of the inventive joint is concerned, the roller carrier 23 should be radially inwardly displaceable relative to the roller 25 with reference to the axis of the tripode star, which displaceability permits greater movements of the arm head 21 when the joint is articulated. Otherwise,~~

~~the functioning process substantially corresponds to that of the roller assembly according to Figure 3.~~

Please add the following new paragraphs after paragraph [0021]:

[0021.1] As far as the functioning of the inventive joint is concerned, the roller carrier 123 should be radially inwardly displaceable relative to the roller 25 with reference to the axis of the tripode star, which displaceability permits greater movements of the arm head 21 when the joint is articulated. Otherwise, the functioning process substantially corresponds to that of the roller assembly according to Figure 3.

Please replace paragraph [0022] with the following amended paragraph:

[0022] ~~Figure 5 shows~~ Figures 5A and 5B show the joint according to Figure ~~1~~ 4 in an illustration analogous to that of Figure 1 in a cross-sectional view, but, relative to the axis A11 of the outer joint part 11, which axis is positioned normally on the drawing plane. The axis A12 of the tripode star 12 is articulated downwardly by 17°. As a result, the upwardly pointing tripode arm 19 has moved forwards from a central sectional position relative to the drawing plane, and the two tripode arms pointing downwardly at an angle have moved backwards from a central sectional position relative to the drawing plane. As a result of this articulation movement, the centers (not illustrated) of the spherical faces 22 of the arm heads 21 and thus also the contact points of the arm heads 21 have each moved radially inwards in the sectional plane relative to the roller carriers ~~23~~ 123. The consequences thereof can be seen in the enlarged detail. The effective line WZ of the arm heads acting on the roller carrier is now clearly radially positioned inside the unchanged effective line WR of the outer joint part relative to the roller 25 which is positioned in the symmetry plane of the roller 25. In this illustration, the roller carrier ~~23~~ 123 is shown in continuous lines in the radially outermost position relative to the roller 25 and the bearing needles 24, a position which the roller carrier ~~23~~ 123 assumes when, free from torque, it moves radially outwardly under the influence of a centrifugal force. When the arm head 21, under torque load, moves from the outermost position radially inwardly, the roller carrier ~~23~~ 123 will leave its outermost position and will move towards the extreme position on the radial inside, which extreme position is shown in dashed lines. The actual position of the roller carrier when torque-loaded should be between the two illustrated positions.

Please replace paragraph [0023] with the following amended paragraph:

[0023] ~~Figure 6 shows~~ Figures 6A and 6B show the joint according to ~~Figure 5~~ Figures 5A and 5B in an illustration which is analogous to the shown in ~~Figure 5~~ Figures 5A and 5B, in a cross-sectional view but, relative to the axis A11 of the outer joint part which is positioned normally on the drawing plane, the axis A12 of the tripode star is articulated perpendicularly downwardly by 31°. As a result, the upwardly pointing tripode arm 19 has moved further forwards relative to the drawing plane, and the two tripode arms pointing downwardly at an angle have again moved further backwards relative to the drawing plane. As a result of this articulation movement, the centers of the spherical faces 22 of the arm heads 21 and thus also the contact points of the arm heads 21 have each moved further radially inwards in the sectional plane relative to the roller carriers ~~23~~ 123. The consequences thereof can be seen in the enlarged detail. The effective line WZ of the arm heads acting on the roller carrier is now positioned at a greater distance radially inside the unchanged effective line WR of the outer joint part relative to the roller which is positioned in the symmetry plane of the roller 25. In this illustration, the roller carrier ~~23~~ 123 is shown in continuous lines in the radially inner extreme position relative to the roller 25 and the bearing needles 24, a position which the roller carrier ~~23~~ 123 assumes when, via the friction forces of the spherical face 22 which act on the arm contact face 40, it is pushed radially inwardly when the joint moves from an aligned position with coaxial axes A11, A12 into the maximum articulated position. As a result, the spherical face 22 of the arm head 21 continues to have secure contact with the arm contact face 40 of the roller carrier ~~23~~ 123. In the examples of Figures 5A, 5B, 6A and 6B, it can be seen that, at the roller assemblies, the axial length of the cylindrical projection 42 and the amount of axial displacement clearance SA are dimensioned such that, with a joint articulation angle of at least 27°, and more particularly of at least 31°, the spherical surface portions 22 of the arm heads 21 are able to establish a carrying contact with the arm contact faces 40 of the roller carriers. The displacement clearance SA can amount to at least 5% of the carrying length of the bearing needles, preferably at least 10% of the length and, in some cases, it can amount to 20-25% of the carrying length of the bearing needles.

IN THE ABSTRACT:

Please replace paragraph [0025] with the following amended paragraph:

[0025] A tripode joint having an outer joint part (11) having three uniformly circumferentially distributed recesses (15) which form pairs of circumferentially opposed tracks (16) for receiving a roller assembly (13). Each roller assembly (13) is carried on an arm (19) of a tripode star (12). Each arm head has a spherical surface portion. Each roller assembly (13) includes an annular roller carrier (23, 123), bearing needles (24) rotating on the roller carrier (23, 123), and rollers (25) which are rotatably supported on the bearing needles (24). The roller carriers (23, 123) include stop collars which delimit the needle contact face, and which are held with an axial displacement clearance in the direction of the roller axes between axial securing members (26, 27) in such a way that they are secured against being lost relative to the rollers (25).

IN THE CLAIMS:

1. (currently amended) A tripode joint comprising:

an outer joint part ~~(11)~~ with a first longitudinal axis (A11) and having an inner recess ~~(14)~~ and three uniformly circumferentially distributed recesses ~~(15)~~ which widen said inner recess ~~(14)~~ and which form pairs of circumferentially opposed tracks ~~(16)~~;

a tripode star ~~(12)~~ with a second longitudinal axis (A12) and having a hub ~~(17)~~ and three uniformly circumferentially distributed tripode arms ~~(19)~~ which are arranged radially at said hub ~~(17)~~ and which each form an arm head ~~(21)~~ with a spherical surface portion ~~(22)~~; and

a roller assembly ~~(13)~~, on each of the arm heads ~~(21)~~, each of the roller assemblies ~~(13)~~ being guided in one of the recesses ~~(15)~~, and each roller assembly ~~(13)~~ comprising an annular roller carrier ~~(23)~~, bearing needles ~~(24)~~ rotating on the roller carrier ~~(23)~~, ~~and rollers~~ a roller ~~(25)~~ which ~~are~~ is rotatably supported on the bearing needles ~~(24)~~,

wherein the roller carriers ~~(23)~~, on their inner faces, each comprise a cylindrical arm contact face ~~(40)~~ and, on their outer faces, a cylindrical needle contact face ~~(41)~~,

wherein the roller carriers ~~(23)~~ are arranged on the arm heads ~~(21)~~ so as to be pivotable and displaceable along an arm axis (AZ) and wherein the rollers ~~(25)~~ roll on the tracks ~~(16)~~ with roller axes (AR) which are substantially axis-normal relative to the first longitudinal axis (A11),

wherein the roller carriers ~~(23)~~, on their outer faces, each comprise stop collars ~~(38, 39)~~ which delimit the needle contact face ~~(41)~~, and which are held with an axial displacement clearance (SA) in the direction of the roller axes (AR) between axial securing members ~~(26, 27) in such a way that they are secured against being lost relative to the rollers (25) and~~ to permit translation of the roller carrier during joint articulation along the needle contact face over the axial displacement clearance (SA),

wherein the roller carriers ~~(23)~~, on their inner faces, with reference to the first longitudinal axis (A11), at least on the radial inside end, each comprise cylindrical

projections ~~(42)~~ which, with reference to the roller axes (AR), increase the axial length of the arm contact faces ~~(40)~~ beyond the extension of the needle contact faces ~~(41)~~, and

wherein the axial securing members comprise at least one securing ring which engages an inner annular groove in the rollers.

2. (currently amended) A tripode joint according to claim 1, wherein, on the roller carriers ~~(23)~~, with reference to the first longitudinal axis (A11), on their radial outside end, the arm contact faces ~~(40)~~ and the needle contact faces ~~(41)~~ are flush with each other.

3. (currently amended) A tripode joint according to claim 1, wherein the roller carriers ~~(23)~~, with reference to the first longitudinal axis (A11), on the radial outside end, each comprise cylindrical projections ~~(43)~~ which, with reference to the roller axes (AR), increase the axial length of the arm contact faces ~~(40)~~ beyond the extension of the needle contact faces ~~(41)~~.

4. (cancelled)

5. (cancelled)

6. (cancelled)

7. (currently amended) A tripode joint according to claim 1, wherein, at the roller assemblies, the axial length of the cylindrical projection ~~(42)~~ and the amount of the axial displacement clearance (SA) are dimensioned to be such that, with a joint articulation angle of at least 27°, the spherical surface portions ~~(22)~~ of the arm heads ~~(21)~~ are able to establish a carrying contact with the arm contact faces ~~(40)~~ of the roller carriers ~~(23)~~.

8. (currently amended) A tripode joint according to claim 2, wherein, at the roller assemblies, the axial length of the cylindrical projection ~~(42)~~ and the amount of the axial displacement clearance (SA) are dimensioned to be such that,

with a joint articulation angle of at least 27°, the spherical surface portions ~~(22)~~ of the arm heads ~~(21)~~ are able to establish a carrying contact with the arm contact faces ~~(40)~~ of the roller carriers ~~(23)~~.

9. (currently amended) A tripode joint according to claim 3, wherein, at the roller assemblies, the axial length of the cylindrical projection ~~(42)~~ and the amount of the axial displacement clearance (SA) are dimensioned to be such that, with a joint articulation angle of at least 27°, the spherical surface portions ~~(22)~~ of the arm heads ~~(21)~~ are able to establish a carrying contact with the arm contact faces ~~(40)~~ of the roller carriers ~~(23)~~.

10. (currently amended) A tripode joint according to claim 1, wherein the displacement clearance (SA) amounts to at least 5% of the carrying length of the bearing needles ~~(24)~~.

11. (currently amended) A tripode joint according to claim 2, wherein the displacement clearance (SA) amounts to at least 5% of the carrying length of the bearing needles ~~(24)~~.

12. (currently amended) A tripode joint according to claim 3, wherein the displacement clearance (SA) amounts to at least 5% of the carrying length of the bearing needles ~~(24)~~.

13. (currently amended) A tripode joint according to claim [[4]] 1, wherein the displacement clearance (SA) amounts to at least 5% of the carrying length of the bearing needles ~~(24)~~.

14. (currently amended) A tripode joint according to claim 7, wherein the displacement clearance (SA) amounts to at least 5% of the carrying length of the bearing needles ~~(24)~~.

15. (currently amended) A tripode joint according to claim 1, wherein the displacement clearance (SA) amounts to at least 10% of the carrying length of the bearing needles ~~(24)~~.

16. (currently amended) A tripode joint according to claim 7, wherein the displacement clearance (SA) amounts to at least 10% of the carrying length of the bearing needles ~~(24)~~.

REMARKS

Claims 1-16 are pending in the application. All claims stand rejected. Claims 1-3 stand rejected under 35 U.S.C. §102 as being anticipated by Schneider, U.S. Patent No. 5,171,185. Claims 7-12 and 14-16 stand rejected under 35 U.S.C. §103 as being obvious in view of Schneider. Finally, claims 4-6 and 13 stand rejected under 35 U.S.C. §103 as being unpatentable over Schneider in view of Hofmann, U.S. Patent No. 5,525,109.

With regard to the drawing objections set forth in paragraph 1 of the Office Action, the Applicant submits herewith substitute drawing sheets for Figures 5 and 6 wherein the enlarged detail has been identified as Figure 5B and the primary figure has been identified as Figure 5A. The same labeling changes have been made to Figure 6A and 6B. The specification has also been amended merely to reflect these label changes. No new matter has been added. A substitute drawing sheet has also been submitted containing Figures 3 and 4 wherein reference numerals 23 and 39 have been indexed by 100 to show the further embodiment of Figure 4. Specification amendments reflecting these reference numeral changes have also been made. Again, no new matter has been added.

With regard to the specification objections set forth in paragraph 3 of the Office Action, page 1, line 23 has been amended to indicate that the assignee of the present invention has been selling tripode joints commonly referred to AAR tripode joints.

The specification objections set forth in paragraph 4 of the Office Action have also been addressed by the foregoing amendments. In particular, a proper antecedent basis has been added in the detailed description portion of the specification for all of the objections noted in paragraphs 4a-4d of the Office Action. Applicant notes that all of these limitations are set forth in the summary of the invention section of the specification but, to overcome the objections, the Applicant has added language commensurate in scope in the detailed description portion of the specification. No new matter has been added.

By the foregoing amendments, the syntax error noted in paragraph 5 of the Office Action regarding claim 1, line 13, has also been corrected.

The Examiner's comments regarding the rejections under 35 U.S.C. §102 and §103 have been carefully considered by Applicant, and Applicant respectfully submits that the case, as presently amended, is in a condition for allowance. As an initial matter, the Applicant has amended all of the claims to remove reference numerals for purposes of clarity. These amendments were not made for any reasons relating to patentability.

With regard to the rejections under 35 U.S.C. §102 and §103, the Applicant traverses the rejections and submits that neither a *prima facie* case of obviousness nor anticipation has been established. In particular, Applicant has amended claim 1 to clarify that the roller carriers 23, 123 on their outside faces, include stop collars defining the needle contact face and that the roller carriers are axially displaceable in the direction of the roller axis (AR) between the axial securing members to permit translation of the roller carrier during joint articulation. This feature has not been narrowed by the foregoing amendments but, rather, clarified. This language makes it clear to one of skill in the art, when read in conjunction with the specification and figures, that the roller carrier 23, 123 is able to slide along the length of the needle bearing over a distance referred to as the axial displacement clearance (SA) until the stop collars 38, 139 contact the securing members 26, 27. This axial displacement clearance provides for larger operational articulation angles of the joint. None of the prior art references disclose or suggest that the roller carriers comprise stop collars delimiting the needle contact face and which are held with an axial displacement clearance between axial securing members to permit translation of the roller carrier during joint articulation as claimed in the present invention. From this language, it is also clear that the axial securing members cannot be an integral part of the roller carrier itself as disclosed in Schneider. Nevertheless, Applicant has further amended the claim to make it clear that the axial securing members are separate elements from the roller carrier 23, 123.

In contrast, Schneider discloses a tripod joint which after assembly, provides no significant axial displacement clearance as both the roller carrier 44 and the roller 54 are held in a locking arrangement in direct contact with the roller assembly chamber 26. Because of the locking arrangement of the inner and outer rollers in the device of Schneider, it is clear that Schneider fails to disclose Applicant's claimed feature wherein the roller carrier is able to translate over an axial displacement clearance between axial securing members during joint articulation. For at least this reason, Applicant requests that the rejections under 35 U.S.C. §102 be withdrawn.

With regard to the rejections under 35 U.S.C. §103, the Schneider reference also admittedly fails to disclose Applicant's claimed securing members. To the extent Schneider discloses any securing members whatsoever, they clearly do not permit the roller carrier to translate in any way over the axial displacement clearance. Indeed, the Applicant traverses the suggestion in the Office Action that Schneider discloses Applicant's claimed axial displacement clearance. Any clearance between the roller needle 64 and needle stops 144, 150 of Schneider is present merely for reasons related to assembly and not to improve the articulation range of the joint as in the present invention. Further, no translation of the inner roller over the deminimizers clearance is possible. Applicant therefore requests that the rejections under 35 U.S.C. §103 with respect to claims 7-12 and 14-16 be withdrawn because the Schneider reference fails to disclose or suggest each and every element of Applicant's claimed invention. Furthermore, because the axial displacement clearance is not a concern in the device of Schneider, Applicant traverses the suggestion in the Office Action that the displacement clearance values set forth in claims 7-12 and 14-16 are merely optimized parameters. Simply put, Schneider does not disclose an axial displacement clearance permitting translation of the roller carrier along the needle contact surface in the direction of the roller axis. Thus, no skilled artisan would be motivated to modify the device of Schneider as suggested in the Office Action.

With regard to the rejections under 35 U.S.C. §103 regarding claims 4-6 and 13, Applicant further submits that one of skill in the art would not be motivated to modify the Schneider reference as the Office Action proposes because the Schneider reference

teaches away from the use of separate axial securing members. Indeed, the entire focus of the Schneider disclosure is to provide a simplified and inexpensive tripod joint that "not only eliminates the snap rings, but also eliminates the costly machining of the snap ring grooves." Col. 2, Ins. 13-15. In light of this, the Office Action fails to set forth any suggestion or motivation to modify the prior art and improperly uses the claimed invention as a template for modifying the prior art. *ACS Hosp. Sys., Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 1577 (Fed. Cir. 1984) ("It is impermissible to use the patent itself as the source of suggestion.") The focus must remain on what the prior art suggested to one of skill in the art at the time that the invention was made, as obviousness cannot be established by combining pieces of prior art absent some "teaching, suggestion, or incentive supporting the combination." *In re Geiger*, 815 F.2d 686, 688 (Fed. Cir. 1987).

The Applicant therefore submits that the present claims are allowable because the prior art relied upon does not disclose or suggest each and every feature of Applicant's claimed invention. Further, no valid reason has been shown as to why one of ordinary skill in the art would modify the Schneider reference to arrive at the claimed invention, particularly since the Schneider reference teaches away from the use of Applicant's claimed axial securing members. For at least these reasons, the rejections under 35 U.S.C. §103 should be withdrawn and a Notice of Allowance indicating the allowability of claims 1-3 and 7-16 should be issued. The Examiner is invited to telephone the Applicant's undersigned attorney at (248) 223-9500 if any unresolved matters remain.

Respectfully Submitted,

ARTZ & ARTZ P.C.

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Southfield, MI 48034
(248) 223-9500

Dated: January 14, 2005

FIG. 3

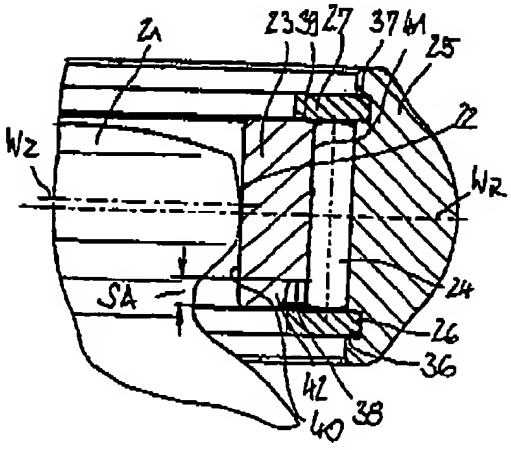
Z1
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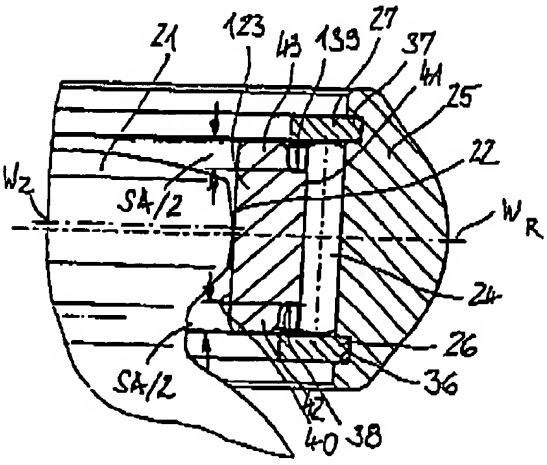
FIG. 4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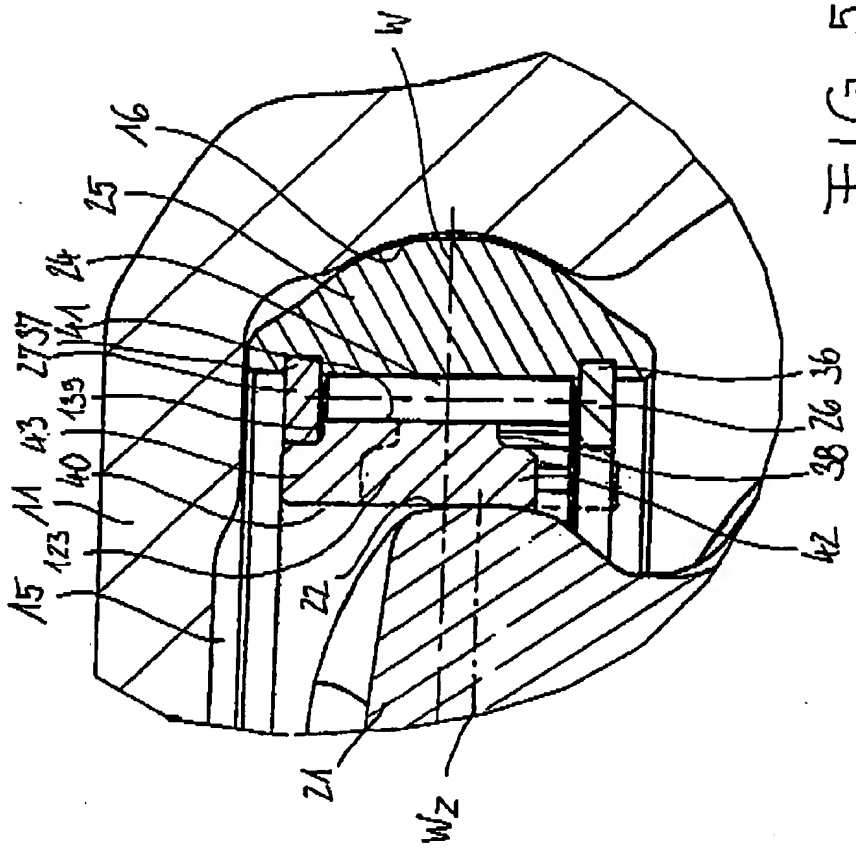

FIG. 5B

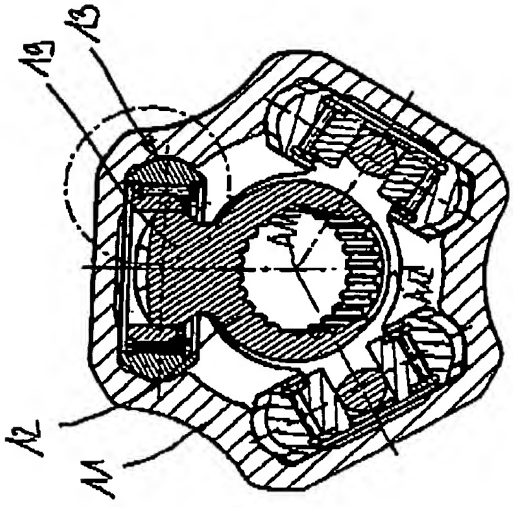

FIG. 5A

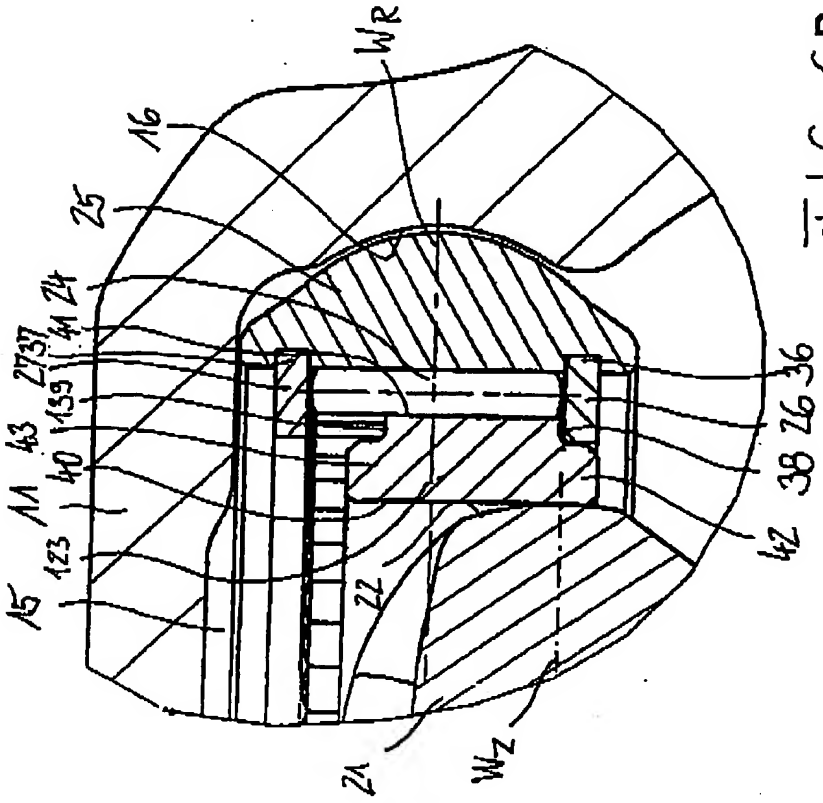

FIG. 6B

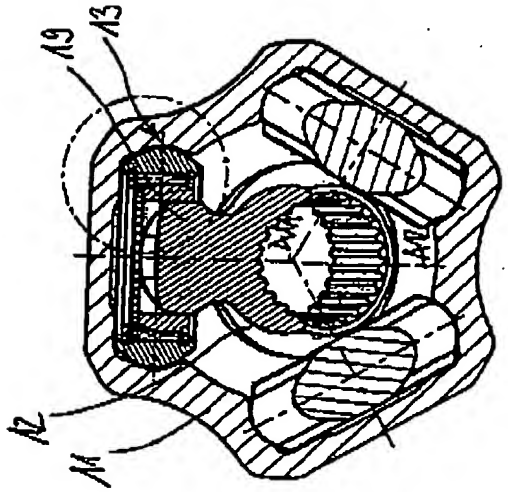

FIG. 6A